DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008657

Address: 333 Burma Road **Date Inspected:** 18-Aug-2009

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Wu Zhi Cheng **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Segments

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 2AW

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing (MT) on the repair welds of the floor beam diaphragm to floor beam weld connection at panel point 16.

Segment 5BW/CB4

This QA Inspector observed drilling of bolt holes on the cross beam side plate and FL3 of 5BW for the bolted splice connection of the segment and cross beam.

Segment 5BW/5CW

This QA Inspector observed the removal of fit up plates after alignment of deck plates to perform CJP splice welding of the transverse splice joint, fit up plates were removed with the use of a cutting torch and the remaining

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

portions ground flush.

Segment 5BE/5CE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) of fit up plates for the alignment of the deck plates for the CJP transverse splice.

Segment 3AW

This QA Inspector observed bolting of the suspender bracket to side plate connection on the counter weight side.

Segment 5BW/5CW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW5A-008. The welder is identified as #220064 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231T. Welding was being performed on the bottom plate transverse splice.

Segment 2BW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD14A-PP17-240. The welder is identified as #058551 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345- FCAW-2G (2F)-FCM-Repair. Welding was being performed on the top plate of the lifting lug on the FL2 floor beam.

ZPMC Quality Control (QC) Inspector is identified as Wang Li Yang. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez, Dan	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer